



THE AUSTRALASIAN COLLEGE
OF DERMATOLOGISTS

Flushing

What is Flushing?

Flushing is a term used to describe transient and episodic reddening of the skin. It occurs most commonly on the face and neck but less conspicuous changes may occur over the entire body.

What is the cause of Flushing?

Flushing is the visible sign of a generalised increase in the skin blood flow that occurs with relaxation of the vascular smooth muscle. This may occur due to changes in the autonomic nervous system (nerve supply which controls our body's internal organs), our body's internal chemicals and hormones (e.g. histamine and serotonin) or external factors (e.g. alcohol, drugs, food and food additives).

There are a number of causes to consider:

- Physiological (due to fever, heat exposure, exercise, embarrassment or anger)
- Exogenous or external agents such as alcohol, drugs, food and food additives
- Menopausal "hot flashes"
- Neurologic disorders such as anxiety or autonomic dysfunction
- Systemic diseases such as carcinoid syndrome, mastocytosis, pheochromocytoma, thyrotoxicosis, POEMS syndrome, thyroid, pancreatic or renal tumors.

What does Flushing look like?

Affected people often report a feeling of heat and burning of the skin during an attack. Repeated flushing may lead to permanent redness, broken capillaries and **rosacea**.

How is Flushing diagnosed?

Flushing is diagnosed by taking a detailed history and physical examination including identifying predisposing factors and associated symptoms. Further laboratory tests, radiologic studies or referral to an endocrinologist may be needed.

It is important to differentiate true flushing from other disorders that lead to facial erythema or redness such as **seborrheic dermatitis**, photosensitivity (sun sensitive) disorders or systemic lupus erythematosus.

How is Flushing treated?

Treatment is typically tailored to the underlying condition or avoidance of trigger factors.

- Green-tinted foundation can help to camouflage flushing.
- Menopausal flushing may respond to hormone replacement therapy, clonidine, selective serotonin reuptake inhibitors (SSRIs) or gabapentin.
- Non-selective β -blockers, clonidine or anxiolytics may be effective in idiopathic or emotional flushing.

- Topical brimonidine gel (selective α_2 -adrenergic receptor agonist), vascular laser or intense pulsed light have been used for individuals with rosacea-related flushing.
- Botulinum toxin A has been used with success to treat neck and anterior chest wall flushing.
- **Endoscopic transthoracic sympathectomy** has been reported to be effective for severe cases of flushing.

This information has been written by Dr Davin Lim and Dr Heba Jibreal